

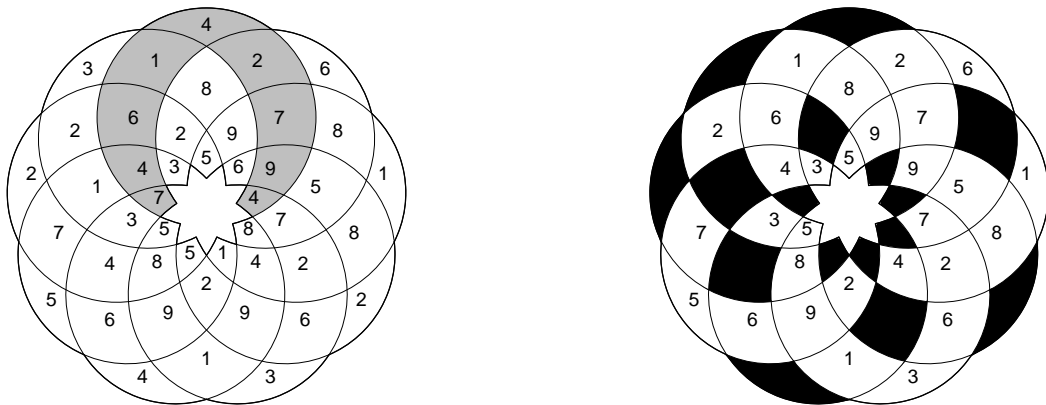
Round 4 – Hitori Variants

Time limit: 45 minutes

Time bonus: 1 point per 20 seconds

4.1 Flower-Hitori – 15 Points

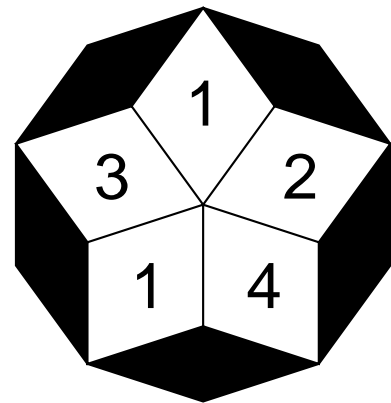
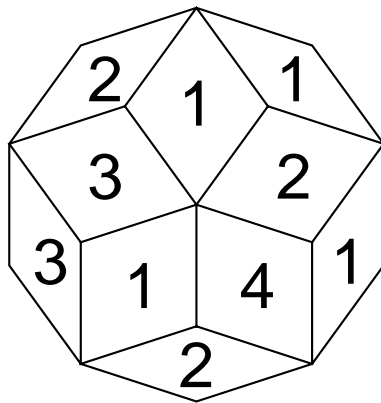
Blacken some fields, so that each number occurs in each arc at most once. All white fields must be connected (that is, the black fields don't cut the grid into more than one part). Black fields may not have a common edge.



Solution code: Number of blackened cells in each arc, starting with the one directly above the star in the middle then moving clockwise. The answer for the example would be 241524333.

4.2 Penrose-Hitori – 15 Points

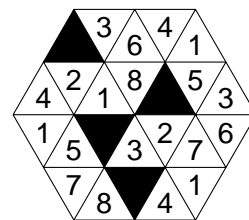
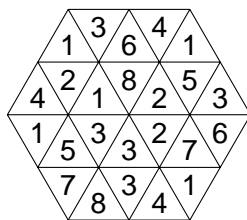
Blacken some fields, so that each number occurs in each row at most once. To get a row, start at the border of the grid, move to the the opposite edge of the rectangle, and proceed until you reach another border of the grid. All white fields must be connected (that is, the black fields don't cut the grid into more than one part). Black fields may not have a common edge.



Solution code: Total number of blackened squares. The answer for the example would be 5.

4.3 Triangle-Hitori – 20 Points

Blacken some fields, so that each number occurs in each direction at most once. All white fields must be connected (that is, the black fields don't cut the grid into more than one part). Black fields may not have a common edge.



Solution code: Number of blackened fields in each horizontal row. The answer for the example would be 1111.

4.4 Little-Killer-Hitori – 30 Points

Blacken some fields, so that each number occurs in each direction at most once. All white fields must be connected (that is, the black fields don't cut the grid into more than one part). Black fields may not have a common edge. Clues outside the grid give the sum of the white fields in the corresponding direction.

3 ↘	3	1	4	2
	3	2	1	3
	2	3	1	4
	4	4	3	2

3 ↘	3	1	4	
		2		3
	2	3	1	4
		4		2

Solution code: Number of blackened fields in each row. The answer for the example would be 1202.

4.5 Skyscraper-Hitori – 35 Points

Blacken some fields, so that each number occurs in each direction at most once. All white fields must be connected (that is, the black fields don't cut the grid into more than one part). Black fields may not have a common edge. Each white number counts as a skyscraper of that height. Clues outside the grid give the number of skyscrapers which are visible in the corresponding direction. Higher skyscrapers cover lower ones. Black fields can not be seen and don't cover any skyscraper.

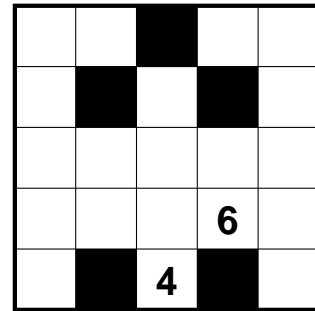
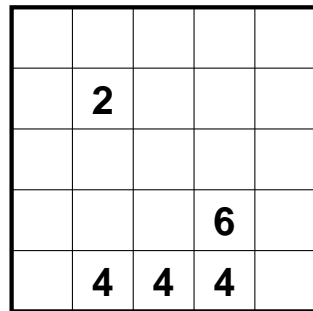
					2
	1	3	2	4	5
	3	2	4	1	1
2	4	4	3	2	5
	4	2	5	1	3
	2	3	1	3	4
					3

					2
	1	3	2	4	
	3		4		1
2		4	3	2	5
	4	2		1	
	2		1	3	4
					3

Solution code: Number of blackened fields in each row. The answer for the example would be 12121.

4.6 Kuromasu-Hitori – 40 Points

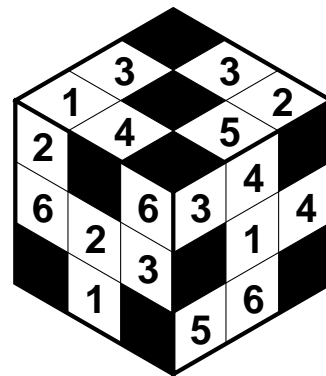
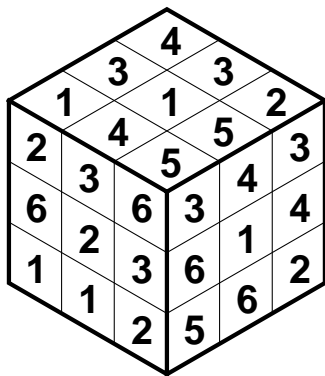
Blacken some fields, so that each number occurs in each direction at most once. All white fields must be connected (that is, the black fields don't cut the grid into more than one part). Black fields may not have a common edge. Numbers in white fields give the number of white fields which are visible horizontally and vertically from there, including the field. This rule doesn't hold for blackened numbers. Black fields block the view.



Solution code: Number of blackened cells in each row. The answer for the example would be 12002.

4.7 Cube-Hitori – 40 Points

Blacken some fields, so that each number occurs in each row at most once. To get a row, start at the border of the grid, move to the the opposite edge of the rectangle, and proceed until you reach another border of the grid. All white fields must be connected (that is, the black fields don't cut the grid into more than one part). Black fields may not have a common edge.



Solution code: Total number of black cells, first for the upper part, then for the left part, then for the right part. The answer for the example would be 333.

4.8 Loop-Hitori – 45 Points

Blacken some fields, so that each number occurs in each direction at most once. All white fields must be connected (that is, the black fields don't cut the grid into more than one part). Black fields may not have a common edge. In the remaining white fields, draw a single continuous loop, which travels orthogonally from field to field and visits each field exactly once.

4	1	3	2
2	1	4	3
3	4	1	2
3	3	2	3

4	1	3	
2		4	3
3	4	1	2
	3	2	

Solution code: Number of blackened fields in each row. The answer for the example would be 1101.